

Appendix E:
Credit Per Acre for Primary Restoration Only

COST ELEMENT	UNIT	BASE UNIT COST (1)	INFLATION FACTOR (2)	FINAL UNIT COST	SOURCE
CAPITAL COSTS					
Restoration of Capped Chat, tailings, and vegetated chat					
Deep filling	acre	\$1,720.00	1.12	\$1,919.92	Jasper County OU-1 ROD, Sep 2004
Biosolids (100 tons/acre)	acre	\$3,000.00	1.12	\$3,348.70	Jasper County OU-1 ROD, Sep 2004
Carbon-rich organic amendment (50 tons/acre)	acre	\$1,500.00	1.12	\$1,674.35	Jasper County OU-1 ROD, Sep 2004
Lime (25 tons/acre)	acre	\$318.75	1.12	\$355.80	Jasper County OU-1 ROD, Sep 2004
Revegetation (native grass and mulch)	acre	\$1,285.00	1.12	\$1,434.36	Jasper County OU-1 ROD, Sep 2004
Total	acre			\$7,298.77	
Restoration of Other Areas (transition zone soils and excavated areas)					
Tilling	acre	\$610.00	1.12	\$680.90	Jasper County OU-1 ROD, Sep 2004
Biosolids (50 tons/acre)	acre	\$1,500.00	1.12	\$1,674.35	Jasper County OU-1 ROD, Sep 2004
Carbon-rich organic amendment (25 tons/acre)	acre	\$750.00	1.12	\$837.17	Jasper County OU-1 ROD, Sep 2004
Lime (12.5 tons/acre)	acre	\$159.38	1.12	\$177.90	Jasper County OU-1 ROD, Sep 2004
Revegetation (native grass and mulch)	acre	\$1,285.00	1.12	\$1,434.36	Jasper County OU-1 ROD, Sep 2004
Total	acre			\$4,804.69	
Indirect Costs					
Mobilization, Demobilization, and Site Prep	of capital costs	1.5%	NA	1.5%	Tar Creek OU-4 Draft FS, Feb 2006
Landowner agreements	of capital costs	1.0%	NA	1.0%	Tar Creek OU-4 Draft FS, Feb 2006
Contingency	of capital costs	20.0%	NA	20.0%	USEPA FS Cost Estimating Guidance, July 2000
Restoration design	of capital costs	6.0%	NA	6.0%	USEPA FS Cost Estimating Guidance, July 2000
Construction management	of capital costs	6.0%	NA	6.0%	USEPA FS Cost Estimating Guidance, July 2000
Total Indirect Percentage	of capital costs	34.5%	NA	34.5%	
OVERSIGHT COSTS					
Personnel Costs for 4 years during restoration	acre	\$140.00	1.12	\$156.80	See Note 3
Total	acre			\$156.80	
10 YEAR MONITORING AND MAINTENANCE (M&M) COSTS					
Vegetation Management	acre x 10 years	\$450.00	1.12	\$504.00	
Monitoring and Maintenance Personnel Costs	acre	\$462.00	1.12	\$517.44	
Contingency	of M&M costs	20.0%	NA		USEPA FS Cost Estimating Guidance, July 2000
Total	acre			\$1,225.73	
TOTAL PRIMARY TERRESTRIAL RESTORATION CREDIT					
Restoration of Chat, Vegetated Chat, and Tailings	acre			\$11,199	
<i>Includes indirect costs, oversight costs, and M&M</i>					
Restoration of T-zone and Excavated Areas	acre			\$7,845	
<i>Includes indirect costs, oversight costs, and M&M</i>					
RIPARIAN CORRIDOR RESTORATION COSTS					
Restoration of corridors injured during remediation					
Bareroot Tree Planting	acre	\$703.00	1.12	\$787.36	
Fencing	acre	\$1,744.00	1.12	\$1,953.28	
Total	acre			\$2,741	

Notes:

(1) As obtained from source documents.

(2) Base unit costs inflated from year of source document to 2007 dollars using Construction Cost Indices (CCI) obtained from *Engineering News-Record*.
May 2007 CCI is 7942.00 (as viewed at <http://www.enr.com/features/coneco/subs/recentindexes.asp>).

2002 CCI	1.21	6538.00
2003 CCI	1.19	6694.00
2004 CCI	1.12	7115.00

(3) Data derived from personal communication with Ms. Becky Clearwater, USFWS, based on 4 years of 0.75 FTE at the GS-11 salary level.